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# (12) United States Patent

Winter et al.

(10) Patent No.:

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(45) Date of Patent:

Jun. 19, 2001

## (54) SINGLE DOMAIN LIGANDS, RECEPTORS COMPRISING SAID LIGANDS METHODS FOR THEIR PRODUCTION, AND USE OF SAID LIGANDS AND RECEPTORS

- (75) Inventors: Gregory Paul Winter; Elizabeth Sally Ward, both of Cambridge; Detlef
  - Güssow, Abington, all of (GB)
- (73) Assignee: Medical Research Council, London (GB)
- (\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35
  - U.S.C. 154(b) by 0 days.
- (21) Appl. No.: 08/470,031
- (22) Filed: Jun. 6, 1995

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Mar. 16, 1989

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(51)	Int. Cl.7		B
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## (57) ABSTRACT

The present invention relates to single domain ligands derived from molecules in the immunoglobulin (Ig) superfamily, receptors comprising at least one such ligand, methods for cloning, amplifying and expressing DNA sequences encoding such ligands, preferably using the polymerase chain reaction, methods for the use of said DNA sequences in the production of Ig-type molecules and said ligands or receptors, and the use of said ligands or receptors in therapy, diagnosis and catalysis.

## 21 Claims, 23 Drawing Sheets